

WHAT IS CLAIMED IS:

1. An information providing system comprising:
  - a transmission server section for transmitting a continuous stream of contents data of a group of multimedia contents including prearranged combinations of program main body data and groups of auxiliary materials;
  - terminal sections for receiving the continuous stream of contents data transmitted from said transmission server section; and
  - said terminal sections being provided with an arrangement control function of preparing a new arrangement by modifying the arrangement order of the contents data by processing the attribute data of each program main body data and that of each auxiliary material of a program as separated from each other as well as the profile data of the user and that of the user device.
2. The information providing system according to claim 1, wherein each of said terminal sections has an on-demand control function of requesting additional contents data on an on-demand basis and taking in said additional contents data on the basis of the result obtained by processing said attribute data and said profile data.
3. The information providing system according to claim 1, wherein each of said terminal sections has a memory means adapted to temporarily replace the profile data with some other profile data.
4. The information providing system according to claim 1, wherein each of said terminal sections has a function of notifying said transmission

server section of the result of reproducing the contents data according to the new arrangement prepared by means of said arrangement control function; and

    said transmission server section has a management function of settling the accounts on the basis of the result of reproducing the contents data according to the new arrangement as notified from said terminal section.

5. An information terminal for receiving the continuous stream of contents data transmitted from said transmission server section, said terminal sections being provided with an arrangement control function of preparing a new arrangement by modifying the arrangement order of the contents data by processing the attribute data of each program main body data and that of each auxiliary material of a program as separated from each other as well as the profile data of the user and that of the user device.

6. The information terminal according to claim 5, additionally having an on-demand control function of requesting additional contents data on an on-demand basis and taking in said additional contents data on the basis of the result obtained by processing said attribute data and said profile data.

7. The information terminal according to claim 5, additionally having a memory means adapted to temporarily replace the profile data with some other profile data.

8. The information terminal according to claim 5, additionally having a function of notifying said transmission server section of the result of reproducing the contents data according to the new arrangement prepared by means of said

arrangement control function.

9. An information providing method comprising:

transmitting a continuous stream of contents data of a group of multimedia contents including prearranged combinations of program main body data and groups of auxiliary materials from a transmission server; and

receiving the continuous stream of contents data by means of an information terminal and preparing a new arrangement by modifying the arrangement order of the contents data by processing the attribute data of each program main body data and that of each auxiliary material of a program as separated from each other as well as the profile data of the user and that of the user device.

10. The information providing method according to claim 9, wherein additional contents data are provided on an on-demand basis in response to a request for the additional contents data made on the basis of the result obtained by processing said attribute data and said profile data.

11. The information providing method according to claim 9, wherein the management function is notified of the result of reproducing the contents data according to the new arrangement prepared modifying the arrangement order of the contents data and an operation of settling the accounts on the basis of the result of reproducing the contents data.

12. An information providing system comprising:

a transmission server section for transmitting a continuous stream of contents

data of a group of multimedia contents including prearranged combinations of program main body data prepared with sorting information annexed thereto and groups of auxiliary materials;

terminal sections having a function of receiving the continuous stream of contents data transmitted from said transmission server section and transmitting the sorting information annexed to the program main body data and the auxiliary materials to be reproduced along with the terminal ID information; and

a processing server section for sending the revision assisting materials, if any, corresponding to the auxiliary materials combined with the program main body data to be reproduced by appropriate ones of said terminal sections on the basis of the sorting information and the terminal ID information transmitted from the terminal sections.

13. The information providing system according to claim 12, wherein said sorting information contains program sorting numbers allocated so as to unequivocally indicate the positions for inserting the auxiliary materials in the program.

14. The information providing system according to claim 12, wherein said sorting information contains a return address identifying the location of said processing server section.

15. The information providing system according to claim 12, wherein said terminal sections have a recording function of recording the program main body data and the auxiliary materials received by the terminal section and a recording function

of recording the sorting information annexed to the program main body data and the auxiliary materials.

16. The information providing system according to claim 12, wherein said terminal sections are adapted to return the program sorting numbers contained in said sorting information along with the terminal ID information to the processing server section specified by the return address contained in said sorting information.

17. An information terminal having:

a function of receiving the continuous stream of contents data transmitted from said transmission server section;

a function of transmitting the sorting information annexed to the program main body data and the auxiliary materials to be reproduced along with the terminal ID information; and

a function of receiving, if any, the revision assisting materials corresponding to the auxiliary material and transmitted on the basis of said sorting information and said terminal ID information.

18. The information terminal according to claim 17, additionally having

a function of recording the program main body data and the auxiliary materials received by it; and

a function of recording the sorting information annexed to said program main body data and said auxiliary materials.

19. The information terminal according to claim 17, additionally having a

function of sending back said sorting information along with said terminal ID information on the basis of the return address contained in said sorting information.

20. An information providing method comprising;

transmitting a continuous stream of contents data of a group of multimedia contents including prearranged combinations of program main body data prepared with sorting information annexed thereto and groups of auxiliary materials;

receiving the continuous stream of contents data and transmitting the sorting information annexed to the program main body data and the auxiliary materials to be reproduced along with the terminal ID information; and

sending the revision assisting materials, if any, corresponding to the auxiliary materials on the basis of the sorting information and the terminal ID information

21. The information providing method according to claim 20, wherein said sorting information contains program sorting numbers allocated so as to unequivocally indicate the positions for inserting the auxiliary materials in the program.

22. The information providing method according to claim 20, wherein said sorting information contains a return address identifying the location of said processing server section for sending back said sorting information along with said terminal ID information.

23. The information providing method according to claim 20, wherein the program sorting numbers contained in said sorting information are sent back to the processing server identified by the return address contained in said sorting information

along with the terminal ID information.

24. An information providing system comprising:

a transmission server section for transmitting a continuous stream of contents data of a group of multimedia contents including prearranged combinations of program main body data prepared with sorting information annexed thereto and groups of auxiliary materials;

terminal sections having a function of receiving the continuous stream of contents data transmitted from said transmission server section, a function of recording the program main body data and the auxiliary materials received by it, a function of recording the sorting information annexed to said program main body data and said auxiliary materials and a function of transmitting the sorting information annexed to the program main body data and the auxiliary materials selected by it along with the terminal ID information; and

a processing server section for detecting any change to be made to the auxiliary materials combined with the selected program main body data and, upon detecting such a change, issuing an instruction for the change made to be made to said auxiliary materials to the related terminal section.

25. The information providing system according to claim 24, wherein said terminal sections have a function of receiving the instruction for the change to be made to the auxiliary materials from said processing server section and sending back the conditions for the instruction for the change and an acknowledgment or refusal of the

change.

26. The information providing system according to claim 25, wherein said terminal sections have a function of receiving the instruction for the change to be made to the auxiliary materials from said processing server section and recording the instruction for the change before starting the reproduction of said auxiliary materials.

27. The information providing system according to claim 26, wherein said terminal sections have a function of recording the instruction for the change from said processing server section and reediting the contents data according to the instruction for the change.

28. The information providing system according to claim 25, wherein upon detecting the existence of revision assisting materials for the auxiliary materials combined with the program main body data selected by said terminal section according to the sorting information and the terminal ID information transmitted from said terminal section, said processing server section notifies said terminal section of the existence of revision assisting materials and, upon receiving an acknowledgment for reception, sends out the revision assisting materials and the instruction for the revision to said terminal section.

29. The information providing system according to claim 25, wherein upon detecting any auxiliary materials to be added to the auxiliary materials combined with the program main body data selected by said terminal section according to the sorting information and the terminal ID information transmitted from said terminal section,

said processing server section notifies said terminal section of the auxiliary materials to be added and, upon receiving an acknowledgment for reception, sends out the assisting materials to be added and the instruction for the addition to said terminal section.

30. The information providing system according to claim 25, wherein upon detecting any auxiliary materials to be omitted in said terminal section according to the sorting information and the terminal ID information transmitted from said terminal section, said processing server section notifies said terminal section of the auxiliary materials to be omitted and, upon receiving an acknowledgment for reception, sends out the instruction for the omission to said terminal section.

31. The information providing system according to claim 25, wherein said processing server section carries out an operation of adding up the contents reproduced at said terminal section according to the sorting information and the terminal ID information transmitted from said terminal section.

32. The information providing system according to claim 25, wherein said processing server section carries out an operation of confirming the copying status of the contents reproduced at said terminal section according to the sorting information and the terminal ID information transmitted from said terminal section.

33. The information providing system according to claim 24, further comprising:

an account settlement means for adding up the instructions for changes to be

made to the auxiliary materials issued from said processing server section to said terminal section and settling the account according to the result of the adding up operation.

34. An information terminal device having:

a function of receiving the continuous stream of contents data;

a function of recording the program main body data and the auxiliary materials received by it;

a function of recording the sorting information annexed to said program main body data and said auxiliary materials; and

a function of transmitting the sorting information annexed to the program main body data and the auxiliary materials selected by it along with the terminal ID information;

35. The information terminal according to claim 34, additionally having a function of receiving the instruction for the change to be made to the auxiliary materials from said processing server section and sending back the conditions for the instruction for the change and an acknowledgment or refusal of the change.

36. The information terminal according to claim 34, additionally having a function of receiving the instruction for the change to be made to the auxiliary materials from said processing server section and recording the instruction for the change before starting the reproduction of said auxiliary materials.

37. An information server device having:

a function of receiving sorting information and terminal ID information from an information terminal having a function of transmitting said sorting information as annexed to selected program main body data and auxiliary materials along with said terminal ID information;

a function of detecting any change to be made to the auxiliary materials combined with the program main body data selected by said terminal section on the basis of the sorting information and the terminal ID information received by it; and

a function of issuing an instruction for the change to be made to the auxiliary materials upon detecting the change to be made.

38. The information server device according to claim 37, wherein upon detecting the existence of revision assisting materials for the auxiliary materials combined with the program main body data selected by said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal, said information server device notifies said information terminal of the existence of revision assisting materials and, upon receiving an acknowledgment for reception, sends out the revision assisting materials and the instruction for the revision to said information terminal.

39. The information server device according to claim 37, wherein upon detecting any auxiliary materials to be added to the auxiliary materials combined with the program main body data selected by said information terminal according to the sorting information and the terminal ID information transmitted from said information

terminal, said information server device notifies said information terminal of the auxiliary materials to be added and, upon receiving an acknowledgment for reception, sends out the assisting materials to be added and the instruction for the addition to said information terminal.

40. An information server device according to claim 37, wherein upon detecting any auxiliary materials to be omitted in said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal, said information server device notifies said information terminal of the auxiliary materials to be omitted and, upon receiving an acknowledgment for reception, sends out the instruction for the omission to said information terminal.

41. The information server device according to claim 37, wherein it carries out an operation of adding up the contents reproduced at said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal.

42. The information server device according to claim 37, wherein it carries out an operation of confirming the copying status of the contents reproduced at said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal.

43. The information server device according to claim 37, further having a function of adding up the instructions for changes to be made to the auxiliary materials issued from said processing server section to said terminal section and outputting the

result of the adding as settlement information.

44. An information providing method comprising:

transmitting a continuous stream of contents data of a group of multimedia contents including prearranged combinations of program main body data prepared with sorting information annexed thereto and groups of auxiliary materials;

detecting any change to be made to the auxiliary materials combined with the selected program main body data and, upon detecting such a change, issuing an instruction for the change made to be made to said auxiliary materials to an information terminal; and

said information terminal having a function of receiving the continuous stream of contents data transmitted from said transmission server section, recording the program main body data and the auxiliary materials received by it, recording the sorting information annexed to said program main body data and said auxiliary materials and transmitting the sorting information annexed to the selected program main body data and auxiliary materials along with the terminal ID information.

45. The information providing method according to claim 44, wherein said information terminal is made to send back the conditions for the instruction for the change and an acknowledgment or refusal of the change.

46. An information providing method according to claim 45, wherein said information terminal is made to receive the instruction for the change to be made to the auxiliary materials and record the instruction for the change before starting the

reproduction of said auxiliary materials

47. The information providing method according to claim 46, wherein said information terminal is made to reedit the contents data according to the instruction for the change to be made as received from a processing server section and recorded.

48. The information providing method according to claim 45, wherein upon detecting the existence of revision assisting materials for the auxiliary materials combined with the program main body data selected by said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal, said information terminal is notified of the existence of revision assisting materials and, upon receiving an acknowledgment for reception, a request is made to send out the revision assisting materials and the instruction for the revision to said information terminal.

49. The information providing method according to claim 44, wherein upon detecting any auxiliary materials to be added to the auxiliary materials combined with the program main body data selected by said information terminal according to the sorting information and the terminal ID information transmitted from said information terminal, said information terminal is notified of the auxiliary materials to be added and, upon receiving an acknowledgment for reception, the assisting materials to be added and the instruction for the addition are sent out to said terminal section.

50. The information providing method according to claim 45, wherein upon detecting any auxiliary materials to be omitted in said information terminal according

to the sorting information and the terminal ID information transmitted from said information terminal, said information terminal is notified of the auxiliary materials to be omitted and, upon receiving an acknowledgment for reception, the instruction for the omission is sent out to said terminal section.

51. The information providing method according to claim 44, wherein an operation of adding up the contents reproduced at said terminal section is carried out according to the sorting information and the terminal ID information transmitted from said information terminal.

52. The information providing method according to claim 44, wherein an operation of confirming the copying status of the contents reproduced at said information terminal is carried out according to the sorting information and the terminal ID information transmitted from said information terminal.

53. The information providing method according to claim 44, wherein the instructions for changes to be made to the auxiliary materials are added up and the account is settled according to the result of the adding up operation.